

ZONG-LIANG YANG
EARTH SYSTEM SCIENCE

PROFESSIONAL PREPARATION

Macquarie University (Australia)	Atmospheric Sciences	Ph.D. 1989 – 1992
Melbourne University (Australia)	Meteorology	M.S. 1986 – 1989
Nanjing Institute of Meteorology (China)	Meteorology	B.S. 1980 – 1984

APPOINTMENTS

2011–	John A. and Katherine G. Jackson Chair in Earth System Science
2011–	Director, Center for Integrated Earth System Science, Univ of Texas at Austin
2008–	Professor (with tenure), University of Texas at Austin
2005–2008	Associate Professor (with tenure), University of Texas at Austin
2001–2005	Assistant Professor, University of Texas at Austin
1993–2001	Postdoc to Research Associate Professor, University of Arizona
1992–1993	Research Associate, Macquarie University, Sydney, Australia

PUBLICATIONS

Five Significant Publications Related to This Project (students underlined)

(A full list of 90+ peer-reviewed papers is at www.geo.utexas.edu/climate/Research/publications.htm)

- Yang, Z.-L., 2004: Modeling land surface processes in short-term weather and climate studies, in *Observations, Theory, and Modeling of Atmospheric Variability*, (ed. X. Zhu), World Scientific Series on Meteorology of East Asia, Vol. 3, World Scientific Publishing Corporation, Singapore, pp. 288–313.
- Yang, Z.-L. and G.-Y. Niu, 2003: The Versatile Integrator of Surface and Atmosphere Processes (VISA) Part 1: Model description, *Global and Planetary Change*, **38**, 175–189.
- Yang, Z.-L., R.E. Dickinson, A. Henderson-Sellers and A.J. Pitman, 1995: Preliminary study of spin-up processes in land surface models with the first stage data of Project for Intercomparison of Land Surface Parameterization Schemes Phase 1(a), *J. Geophys. Res.*, **100 (D8)**, 16,553–16,578.
- Yang, Z.-L., Y. Dai, R.E. Dickinson, W.J. Shuttleworth, 1999: Sensitivity of ground heat flux to vegetation cover fraction and leaf area index, *J. Geophys. Res.*, **104 (D16)**, 19505–19514.
- Yang, Z.-L., G.-Y. Niu, K. E. Mitchell, F. Chen, M. B. Ek, M. Barlage, L. Longuevergne, K. Manning, D. Niyogi, M. Tewari, and Y.-L. Xia, 2011: The community Noah land surface model with multiparameterization options (Noah-MP): 2. Evaluation over global river basins, *J. Geophys. Res.*, **116**, D12110, doi:10.1029/2010JD015140.

Five Other Related Publications

- Gulden, L. E., Z.-L. Yang, and G.-Y. Niu, 2007: Interannual variation in biogenic emissions on a regional scale, *J. Geophys. Res.*, **112 (D14)**, D14103, 10.1029/2006JD008231.
- Jiang, X., G.-Y. Niu, and Z.-L. Yang, 2009: Impacts of vegetation and groundwater dynamics on warm season precipitation over the Central United States, *J. Geophys. Res.*, **114**, D06109, doi:10.1029/2008JD010756.

- Lo, J. C.-F., Z.-L. Yang, and R. Pielke Sr., 2008: Assessment of dynamical climate downscaling methods using the Weather Research and Forecasting (WRF) model, *J. Geophys. Res.*, **113**, D09112, doi:10.1029/2007JD009216.
- Rosero, E., Z.-L. Yang, L. E. Gulden, G.-Y. Niu, and D. J. Gochis, 2009: Evaluating enhanced hydrological representations in Noah-LSM over transition zones: Implications for model development, *J. Hydrometeorology*, **10**, 600–622. DOI:10.1175/2009JHM1029.1
- Su, H., Z.-L. Yang, R. E. Dickinson, C. R. Wilson, and G.-Y. Niu, 2010: Multisensor snow data assimilation at the continental scale: The value of Gravity Recovery and Climate Experiment terrestrial water storage information, *J. Geophys. Res.*, **115**, D10104, DOI: 10.1029/2009JD013035.

SYNERGISTIC ACTIVITIES

- Co-Chair, NCAR CCSM Land Model Working Group, 2008–present
 UT-Austin Member Representative, University Corporation for Atmospheric Research (UCAR), 2001, 2003, 2005, 2008–present
 Co-Chair, 1st International Symposium on Regional Earth System Modeling and Analysis, Beijing, China, 19–22 May, 2011
 Organizer, NOAA/NCEP Land Surface Modeling Workshop, Austin, Texas, 19–22 April, 2010
 Organizer, “Land–Atmosphere Interactions”, 21st Conference on Hydrology, American Meteorological Society 87th Annual Meeting, San Antonio, Texas, 14–18 January 2007

COLLABORATORS AND OTHER AFFILIATIONS

Graduate Students Advised and Post-docs/Research Associates Sponsored Last 5 Years

Cedric David (Ph.D., 2007–2009), Lindsey E. Gulden (Ph.D., 2004–2009), Xiaoyan Jiang (Ph.D., 2006–2010), Marla R. Knebl Lowrey (Ph.D., 2002–2006), Enrique Rosero (Ph.D., 2007–2009), Bryan Hong (2008–2011), Hua Su (Ph.D., 2005–2009), Guo-Yue Niu (Research Associate 1998–2009)

Collaborators Last 4 Years

Jay Banner, UT-Austin; Gordon Bonan, NCAR; Fei Chen, NCAR; Robert E. Dickinson, UT-Austin; Jay Famiglietti, UCI; C. Fu, Nanjing University, China; Dave Gochis, NCAR; Dave Lawrence, NCAR; Z.G. Ma, Chinese Academy of Sciences, China; Ken Mitchell, NCEP; Keith Oleson, NCAR; Roy Rasmussen, NCAR; Matt Rodell, NASA; H.Q. Tian, Auburn University

Graduate and Postdoctoral Advisors

Ian Simmonds, MS Advisor, Melbourne University, Australia
 Ann Henderson-Sellers, Ph.D. Advisor, Macquarie University, Australia
 Robert E. Dickinson, Postdoctoral Advisor, University of Texas at Austin
 W. James Shuttleworth, Postdoctoral Advisor, University of Arizona